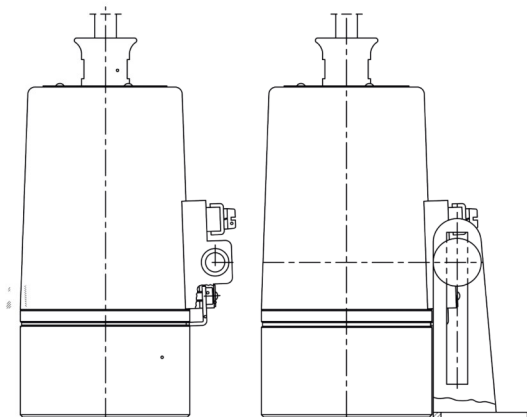


Luminaire ESL25-Ex in potentially explosive environments



For mounting on sight glass fittings

- Designed for universal applications, this Ex-type sight glass luminaire has been developed for use in potentially explosive environments. It is ideal for combined sight glass and light assemblies, either as a single-flange version or with two separate flanged ports.
- Dazzle-free illumination, for use with circular sight glass fittings to DIN 28120/ DIN 28121 or similar, with screwed sight glass units in compliance with DIN 11851, in visual flow indicators and Metaglas sight glasses with triclamp connection
- Ideal for use in sterile and food areas in connection with Metaglas triclamp connection.

Operating conditions:

- Independent of the internal pressure/ vacuum in vessel. Under no circumstances should a sight glass luminaire be used to replace the mating flange or the sight glass/luminaire assembly or on its own to close a vessel port
- Lumistar luminaires of this type are approved for use in ambient temperatures up to 50°C.

Materials

- Body: Stainless steel 1.4404, polished
- Fastening components: Stainless steel 1.4301
- Cable entry gland: M20 x 1.5
- Weight: 1.8 kg

Technical data Ex protection:

- This luminaire meets the essential safety and health requirements
- by complying with the regulations for
- a) Gas
EN IEC 60079-0: 2018 General Requirements
EN 60079-1: 2014 Flame-proof Enclosure 'd'
Explosion group: IIC (includes II A and II B)
- b) Dust
EN IEC 60079-0: 2018 General Requirements
EN 60079-31: 2014 Protection by Enclosures 't'
Explosion group: IIIC (includes IIIA and IIIB)
Temperature class: T80°C
- Beam angle: 12°; 25°; 38°

Certification:

- EU Type-Examination Certificate BVS 08 ATEX E 137
- II 2G Ex db IIC T6 Gb
- II 2D Ex tb IIIC T80°C Db

Voltage:

- Alternating/direct current, depending on luminaire type

Connection cable:

- pressure-tight, cast connection cable with cable gland at the factory, 2 m (standard), alternatively 10 m length or externally tested and approved cable entry M20x1.5

Typ ESL25-Ex	Voltage	LED	
		Power	Luminous flux
24V AC/DC - 7,5W	24V ~	7W	360-430 Lumen
110-230 V AC - 7,5 W	230 ~	7W	360-430 Lumen

Luminaire ESL25-Ex installation and operating instruction

Important note:

- Sight glass luminaires are intended for a specific purpose and are designed exclusively for mounting on or onto sight glass flange sockets. Under no circumstances may a sight glass lamp replace the mating flange or the complete sight glass flange socket, or be used directly to cover a container opening. Luminaires for hazardous areas may only be installed, connected and maintained by specially trained and authorised personnel. It is essential to observe the data of the EU type examination certificate! Caution: Do not look into light – danger of impaired eyesight!

Electrical data:

Voltage, power, temperature class and degree of protection can be found on the nameplate.

Ex approval according to EU type examination certificate:

BVS 08 ATEX E 137

II 2G Ex db IIC T6 Gb

II 2D Ex tb IIIC T80°C Db

Mechanical installation:

- The Lumistar luminaire ESL25LED-Ex is suitable for sight glasses in the following nominal sizes, using the appropriate mounting:
- sight glass fittings to DIN28120: DN25-200
- sight glass fittings to DIN28121: DN40-200
- Screw-type sight glass fitting similar to DIN 11851: DN65-125

Mounting by way of hinged bracket

- The hinged bracket is used to secure the luminaire to the mating flange of a circular sight glass fitting (also suitable for visual flow indicators). Alternatively, it can be attached to the slotted cover nut of screw-type sight glass fittings to DIN 11851. The hinged bracket is fixed in place by the supplied M8 screw. An additional option is to weld on the bracket.

Mounting by way of flange adapter collar or on Metaglas with collar for ESL25-A

- The plug-in flange is fitted between the glass plate and the slotted nut (DIN 11851):
- Place a suitable seal between the glass plate and the plug-in flange
- Tighten the slotted cover nuts
- Insert the light into the flange
- Please note: The Lumistar luminaire variant for sterile technology is slipped over the collar of the sterile technology flange or Metaglas sight glass type 80.ESL25(A)
- Tighten the lateral retaining screws

Electrical connection:

- The cable tail is already works-fitted in the luminaire and is ready for use.
- The external protective conductor terminal (pos. 2) must be connected to separate operating earth.
- The connecting cable must be intercepted after a maximum of 1 m.

Attention! When replacing cables (e.g. other lengths), the inner connections must be loosened before unscrewing the cable entry.

Special operating conditions:

The Ex luminaires are manufactured with a permanently connected cable. The free ends of the connecting cable must be installed in a category 2G/2D enclosure if the connection is made in a potentially explosive atmosphere.

Before installing or repairing the luminaire, it and the area where it is to be installed must be cleaned of dust. The dismantled parts must be protected from contamination during installation or repair.

When closing the luminaire, make sure that the inside of the luminaire is free of dust. The connecting cable must be laid in such a way that static charging is ruled out.

Installation steps for module change:

- Disconnect the light from the power supply
- Observe waiting time according to nameplate
- Loosen locking screw (pos. 3) for screwed glass (pos. 6);
- This releases the safety angle (pos. 4)
- Unscrew the screw glass (pos. 6) only with a mounting wrench
- Replace and connect the module
- Screw in the screw glass (pos. 6) again until it is tight. (pressure against the O-ring)
- Safety bracket (pos. 4) must engage in the groove provided so
- that the screw glass (pos. 6) is locked
- Tighten locking screw (pos. 3) again
- Apply voltage

